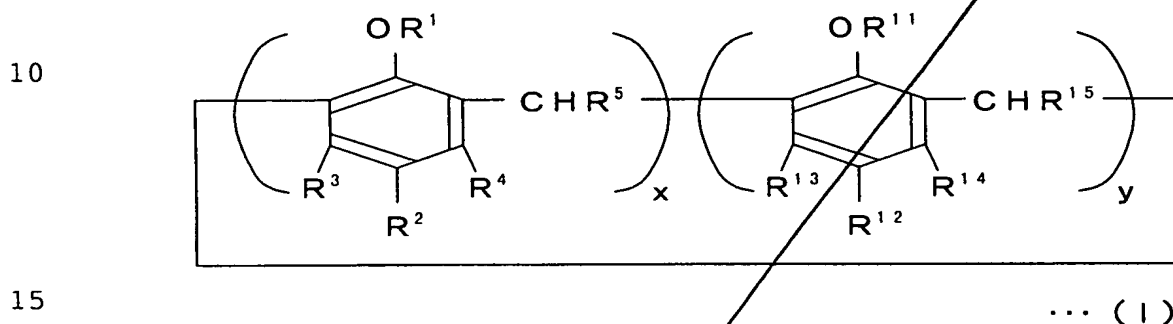


CLAIMS

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1. A color imaging toner, comprising at least a binder resin and a colorant, which is used in an imaging process employing a photofixing system, said imaging color toner further comprising a combination of:
- 5 a calixarene compound represented by the following formula (I):



wherein R¹, R², R³, R⁴ and R⁵ may be the same or different and each represents a hydrogen atom, an alkyl group, a group of  $-(CH_2)_mCOOR^{10}$  in which R¹⁰ represents a hydrogen atom or an alkyl group, and m represents a positive integer, a group of  $-N(R^7)_2$  in which R⁷ represents an oxygen atom, a hydrogen atom or an alkyl group, a group of  $-SO_3R^8$  in which R⁸ represents a hydrogen atom or an alkyl group, an aryl group or a group of  $-Si(CH_3)_3$ ,

20 R¹¹, R¹², R¹³, R¹⁴ and R¹⁵ may be the same or different and each represents a hydrogen atom, an alkyl group, a group of  $-(CH_2)_mCOOR^{20}$  in which R²⁰ represents a hydrogen atom or an alkyl group, and m represents a positive integer, a group of  $-N(R^{17})_2$  in which R¹⁷ represents an oxygen atom, a hydrogen atom or an alkyl group, a group of  $-SO_3R^{18}$  in which R¹⁸ represents a hydrogen atom or an alkyl group, an aryl group or a group of  $-Si(CH_3)_3$ , and

25 x and y each represents 0 or a positive integer, and

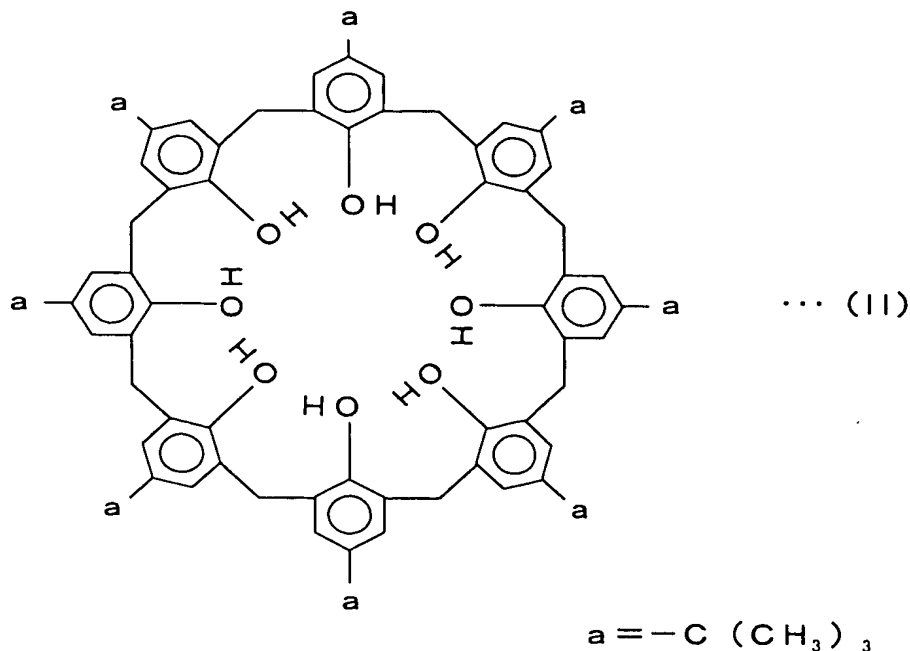
30 an infrared absorbing compound which shows a light absorption peak at a wavelength ranging from 700

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~~to 1000 nm.~~

2. The color imaging toner according to claim 1, wherein the calixarene compound is a compound of the following formula (II):



3. The color imaging toner according to claim 1 or 2, wherein the infrared absorbing compound is phthalocyanine, naphthalocyanine or a mixture thereof.

4. The color imaging toner according to claim 1 or 2, wherein 100 parts by weight of a toner is mixed with 0.1 to 10 parts by weight of the calixarene compound and 0.01 to 5 parts by weight of the infrared absorbing compound.

5. The color imaging toner according to claim 1 or 2, wherein the photofixing system is used at a light emission energy density ranging from 1.0 to 6.0 J/cm<sup>2</sup>.

6. The color imaging toner according to claim 1 or 2, wherein the color toner is used in an electrographic imaging process employing a photofixing system.

7. A method of forming a color image on a recording medium by means of an electrophotographic system which comprises the steps of forming an



fixing the transferred image onto the recording medium,  
wherein

the developing device is loaded with a  
developing agent which contains a color toner comprising  
5 at least a binder resin and a colorant and further  
comprising a combination of:

a calixarene compound represented by the  
above formula (I) wherein  $R^1$ ,  $R^2$ ,  $R^3$ ,  $R^4$  and  $R^5$ ,  $R^{11}$ ,  $R^{12}$ ,  
10  $R^{13}$ ,  $R^{14}$  and  $R^{15}$ , and  $x$  and  $y$  are as defined above, and

an infrared absorbing compound which shows  
a light absorption peak at a wavelength ranging from 700  
to 1000 nm; and

the image fixing device is provided with a  
photofixing device having a light emission energy density  
15 ranging from 1.0 to 6.0 J/cm<sup>2</sup>.

12. The color image forming apparatus according to  
claim 11, wherein the calixarene compound is a compound  
of the above formula (II).

13. The color image forming apparatus according to  
20 claim 11 or 12, wherein the infrared absorbing compound  
is phthalocyanine, naphthalocyanine or a mixture thereof.

14. The color image forming apparatus according to  
claim 11 or 12, wherein 100 parts by weight of a toner is  
mixed with 0.1 to 10 parts by weight of the calixarene  
25 compound and 0.01 to 5 parts by weight of the infrared  
absorbing compound.

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